

## [The Community College Program at BIO 2014](#) [Speaker Biographies](#)

### *Keynote Address: A View from BIO*

*Peter M. Pellerito*, BIO Senior Advisor, Economic Development and University/College Relations

### *Panel: Workforce Readiness for Bioscience Emerging Technologies*

*Dr. Sulatha Dwarakanath* is the Coordinator of Bioscience Credentials TAACCCT-DOL for Austin Community College, Austin TX. She has a wide background in Nanotechnology, Diagnostic Assay Development, especially Clinical Diagnostic Assays for Point of Care Testing. As an adjunct faculty in the Biotechnology Department at Austin Community College, she has worked on Skills Standards, Curriculum Development for the emerging biotech market. She has previously worked at Bayer Diagnostics (now Siemens Diagnostics) in their R&D and Clinical Trials divisions. She later on worked on POCT IVDex, AccuDx (startup companies). She is also the co-founder of Nano Science Diagnostics (NSD) Inc. She received her Ph.D. in Biochemistry from New York University.

*Giovanna Taylor* currently serves as the Director for Biomedical Technology at St. Petersburg College, Clearwater, Florida. She completed her undergraduate education in Health Care Administration at Florida Atlantic University, graduate education in Health Care Administration and Public Administration at Florida International University, and further graduate education in Health Information Technology at the University of Central Florida. Ms. Taylor has spent the better part of her career in research and program development in higher education and the public sector, as well as in organizational development and strategic planning for non-profit organizations. She spent three years as a consultant to the Florida Supreme Court as a project director overseeing and conducting research on racial bias in law education and legal practices in Florida. Ms. Taylor worked for five years at the University of South Florida developing programs and conducting research related to juvenile delinquency prevention in primary and secondary educational settings. She also spent two years at Florida International University as an instructor for the Professional Development Center developing professional training curriculum for Masters level mental health counselors. Ms. Taylor has traveled internationally as a consultant for the National Association of Social Workers and has developed numerous social welfare programs in collaboration with state and local governments.

*Sarah Schober* is the Director of Food and Natural Products for BioNetwork. She works closely with the food and natural products testing and manufacturing programs and assists businesses and entrepreneurs with laboratory, manufacturing, and regulatory practices. Sarah has developed and delivers a cGMP (current Good Manufacturing Practices) education and training program for dietary supplements. Sarah also assists in outreach efforts with K-12 teachers and students, including class and laboratory demonstrations. Her academic preparation began at Asheville-Buncombe Technical Community College in Asheville, NC, where she earned an Associates of Applied Science in Biotechnology as well as Associate degrees in Arts and Science. She then earned a Bachelor's of Science in Industrial Technology with an emphasis in Bioprocessing and a minor in Industrial Supervision from East Carolina University. She is currently pursuing a graduate certificate in Food Safety at the University of Southern California. Sarah joined the BioNetwork in 2006.

***Kristina Stumpf*** is employed as a Laboratory Technician at the Wake Forest Institute for Regenerative Medicine in Winston - Salem NC. She is a recent graduate of the Biotechnology Program of Forsyth Technical Community College having achieved her Applied Associates Degree in Biotechnology.

***Russ H. Read*** has worked in the bioscience industry for over thirty five years. Formerly he was an executive with the Burroughs Wellcome and Glaxo Wellcome companies. He was heavily involved with the commercial development of antivirals like AZT and 3TC which are mainstay treatments for HIV illness. Russ has a special interest in the bioscience workforce. He was CEO of the Kucera Pharmaceutical Company- a start- up biopharmaceutical company based in Winston-Salem. He has recently led a national biotechnology workforce effort for nine years called the National Center for the Biotechnology Workforce (NCBW). The NCBW is based in Winston-Salem and was originally a large US DOL grant but is now a part of North Carolina's BioNetwork. The NCBW focuses on achieving best practices for bioscience workforce training with its national partners, such as the US DOL and the NSF. A recent partner is The Manufacturing Institute based in Washington, D.C. In October 2012, a twelve member national consortium of community colleges, led by Forsyth Tech, won a \$15 million US DOL Trade Adjustment Assistance grant looking at building biosciences workforce skill standards and credentials. Russ is the consortium's Project Director. Russ is also the Principal Investigator for the NSF ATE Project grant named the Biosciences Industrial Fellowship Program. He currently serves as Past-Chair of the Advisory Committee for the NC Biotech Center's Piedmont Triad regional office and is a Director of NC BIO. He also serves on the National Visitor's Committee of the NSF ATE national program called Bio-Link and is an advisor to the NSF ATE NBC2 program.

### ***Panel: Biotech Education Goes Global: International collaboration in the education and training of biotechnology technicians***

***Jim DeKloe*** serves as the director and founder of the industrial biotechnology program at Solano College in the North San Francisco Bay area. This program emphasizes biomanufacturing by training students in the skills required to work in companies that have located in the biotech manufacturing cluster in Solano County (located half way between San Francisco and Sacramento). This program has served as the model for biotechnology programs all around the country. He served as the regional director of the Southwest Region of Bio-Link, the nationwide consortium of community and technical colleges that teach biotech. On sabbatical he worked in the manufacturing department of biotech pioneer Genentech Inc. He also served as a consultant to help biotech giant Amgen redesign the training programs for their biomanufacturing technicians and for their quality assurance associates. He currently serves on the advisory committee for the Explorer Education Division of BioRad, and on the advisory committees of multiple college and high school biotechnology programs. In 2000, the Association of Community College Trustees chose Jim as the Distinguished Faculty Member of the Pacific Region which includes the Western United States and Canada, Hawaii Alaska and Guam. In 2011 Solano College faculty chose Jim as the Distinguished Faculty Member of the Year. He was one of the founders of the Haiti Bioscience Initiative – with Philip Gibson, who he met through the Bio-Link network.

***François Schubert***, as the General Manager and Chief Operating Officer of the Research Institute of the MUHC, brings 35 years of national and international experience in pharmacy, healthcare and biopharmaceutical industry. In addition to executive/senior management experience, Mr. Schubert is a researcher in Health economics and held the position of Worldwide Vice-President of the Global Health Outcomes department at Glaxo Wellcome/Glaxo Smith Kline headquarters offices in London, UK from 1995 to 2001. He holds degrees in pharmacy, health administration and public health and is a fellow of one Canadian and two American professional associations.

***Dr. Stephen Dahms*** has gained a lot of experience in the area of international biotechnology education. He has made presentations in industry and professional meetings in over a baker's dozen of countries. Until 2006 he served as Associate Editor and Biotechnology Editor of BAMBED (Biochemistry and Molecular Biology Education). He has published 28 articles on US and international biotechnology education over the previous decade. From 1995-2006, Steve was also one of 3 US representatives on the Education Committee of the IUBMB (International Union of Biochemistry and Molecular Biology). This organization is the parent organization of the biochem and mobio professional societies from 76 countries. He was also one of five international members of the IUBMB Biotech and Pharma Industry Committee. Additionally, from 1986-1996 Steve was one of three US representatives on the PABMB (Pan-American Association of Biochemistry and Molecular Biology, covering the Western Hemispheric professional societies) Exec Committee and education committee and he chaired the Latin American Committee of the American Society for Biochemistry which had deep immersion in educational matters. Steve has also been involved in education and research training activities of the OECD, COBIOTECH, the European Federation of Biotechnology, the International Human Proteome Organization, etc., but these are, however, all in the past.

### ***Lunchtime Keynote: Community College Collaborations in the Biosciences-Past, Present, and Future Trends***

***Dr. Gary Green***, President of Forsyth Technical Community College

### ***Lunchtime Keynote: Highlights from the 2014 CSBI Demand for Talent in the Life Sciences Industry Report***

***Lori Lindburg***, Executive Director, BayBio Institute

### ***Panel: The Faces of Success***

***Elaine A. Johnson, Ph.D.*** is the Executive Director of Bio-Link, a National Science Foundation Advanced Technological Education National Center for Biotechnology and Life Sciences based at City College of San Francisco. Elaine specializes in creating partnerships between educational institutions and industry. She promotes articulation in the effort to create career pathways. Elaine is nationally recognized as an innovator and leader in education for careers in biotechnology. In 2010 she received the John Blackburn Exemplary Models Award from the American Association for University Administrators. She is the Co-PI on the Synergy Scaling Project, participates in several ATE National Visiting Committees, and serves on the 2013 Advisory Board for the AAAS Vision and Change in Undergraduate Biology Education. In addition, she is one of the hub leaders of the Community College Consortium for Bioscience Credentials Department of Labor Trade Adjustment Assistance Community College Career Training Grant.

**Maria E. Rodriguez-Aguirre** has over 10 years of biotechnology experience, which includes working in Dr. Chory's lab at the Salk Institute, where she was second author on a Science publication titled, "*A Role for Peroxisomes in Photomorphogenesis and Development of Arabidopsis*" as an undergraduate student. Other companies that Maria has worked for are Cibus LLC, Vaughan Foods and she presently is employed at Tocagen, working on new cancer models with clinical grade vector. While working full-time at Tocagen, Maria attended National University as a full-time student, earning both a Bachelor's and a Master's degree in Biology. Maria founded and became president of the Biology Club at National, helping students with lab topics, seminars, journal clubs and job searches. Maria was also the recipient of several awards at the 8th Annual National University Spring symposium: the College of Letters and Science graduate award and overall graduate award for a poster entitled, "*Toca 511 gene therapy in combination with 5-fluorocytosine for intratumoral production of 5-fluorouracil in a colon cancer metastasis model*". Her other awards include MESA Student Recognition Award, SWC Scholarship Award, ASO Scholarship Award, ASO Student Service Award, and ASO Executive Board Award. Outside of school and work, Maria is the parent of two grown children and married to her husband of 20 years. Her future plan is to pursue a Ph.D. in Immunology in Cancer Biology.

**Kristina Stumpf** began her collegiate journey at a small community college in 1992. Increasing financial burden, however, forced her to stop within 12 credits of graduating, and she immediately began working full-time. When her son was attending kindergarten, she decided to return to school and complete her degree. In 2011, Kristina attended her first class, Organic Chemistry, at Forsyth Technical Community College. While the class was very difficult, Kristina took the initiative to go for tutoring to learn the subject. Her hard work paid off, and she earned an "A" in the course, and few years later, she graduated the program with honors. Kristina was extremely fortunate in that her program internship resulted in a permanent position as a Laboratory Technician at Wake Forest Institute for Regenerative Medicine (WFIRM). Kristina works in two laboratories. One laboratory focuses on breast cancer and the tumor microenvironment, led by Frank C. Marini, Ph.D., and the other laboratory focuses on bladder and muscle regeneration under the guidance of George Christ, Ph.D. While only working at WFIRM for a little over a year, she has gained a tremendous amount of experience with many cutting-edge techniques, including live multi-photon imaging of rodents, multi-sequential immunofluorescence staining of tissue, and high end multi-spectral imaging.

**Daniel Pedry** was born on March 19, 1985, in Washington D.C. and spent the early years of his life in many places, living overseas, in Maryland, Wyoming, Virginia, and Montana, where he graduated from high school in 2003. In 2005, he enlisted in the United States Marine Corps, where he served as an Infantryman with 3rd Battalion, 1st Marines for four years. In 2010, he began classes at MiraCosta College as a Kinesiology major. After attending a lecture at one of MiraCosta's Biotechnology Speaker Series, he decided to pursue an Associate's Degree in Biotechnology Research and Development. In 2012, Daniel applied for and received an internship as part of UCSD's Research Experience for Undergrads and spent three months in the Metallo Lab, taking part in research on cellular metabolic pathways. Also in 2012, Daniel was granted a spot as a CIRM intern where he spent a year in the Laurent Lab participating in research on hepatocyte differentiation. Both internships gave him not only valuable lab experience, but an excellent education on academic research and collaboration. He now works as a contract employee at Genentech, Oceanside in the

downstream purification process of their drug manufacturing operations. He plans to pursue a degree in Biostatistics at UC Berkeley.

*Tracy T. Naputi (Ludwick)* received her first Biotech Certificate in 2010 and received another one in Biofuels in 2011. In 2012, she decided to try interviewing at a few Biotech companies as practice. The second company, INOVA Diagnostics, hired her as a Lab Assistant II. The department that hired her never had a Lab Assistant; a job description had not been established and Tracy's job description was written on the first day. After a few trial months, the management team decided that the Lab Assistant position benefitted the department in many ways and hired a few more. Tracy was in charge of the Lab Assistants and trained the new Lab Assistants. During her time at INOVA, Tracy has been able to apply the many skills she acquired from the Biotech Programs. She wrote and established a brand new SOP that is currently used for one of INOVA's procedures, assisted in revising our procedural documents, and wrote a new procedural document for an INOVA product. In September 2013, another position was created for Tracy, and she was promoted to a Lab Assistant III and given the opportunity to refer other Biotech students to any Lab Assistant positions that opened. She was in charge of the Lab Assistants group in her department and was a member on the hiring team and given the chance to interview applicants. In March of 2014 she was promoted to Chemist I at INOVA.

*Katrice Jalbert* started the apprenticeship program at Great Bay Community College when she was 18 years old. Katrice completed an apprenticeship at Lonza Biologics and has continued to advance her career within the company. If not for the opportunity of the apprenticeship, which worked closely with Lonza's training needs, she would not have been able to begin her career at such a young age. She was hired as a manufacturing operator, performing purification of therapeutic medicine. After moving around to a few different departments within the company, Katrice is currently a QA technical writer. Her job includes development of documents used in manufacturing, which instruct the operators on how to perform their tasks. She has also been on special projects within the company, partaking in their innovation process for developing new methods to complete documentation. Having the background of the apprenticeship and the classes completed at Great Bay Community College, she was able to confidently reach her goal of starting a career in Biotechnology.

*Cali Nguyen* experienced her first stint in scientific research in high school when she participated in two internships at the University of Southern California School of Medicine under the American Chemical Society's Project SEED Program. In her early twenties, she tried to be a writer of fiction and an English teacher but instead fell into technical writing, tutoring and manicuring. Through Kate Levine and the Biotechnology program at Contra Costa College she then worked as an assistant at Bay Bioanalytical Laboratories (BBL). BBL is a small laboratory in the San Francisco Bay Area that performs work in analytical chemistry for pharmaceutical companies. It was there in the wet lab during long days of dishwashing and processing boxes of strange powders, medical devices, and bodily fluids that she figured out the career path for herself. She wanted to advance within the field of research, and in order to do so, she needed to go back to school. At Pasadena City College (PCC) she took every biological technology course that was offered there and earned their certificates in stem cell culture and computational biology. When interviewing for positions, her hands-on experiences at Contra Costa College, BBL, and PCC gave her an advantage over new graduates from



traditional four-year universities. In all of her positions at Oak Crest, Auritec, Cohbar and BCN Biosciences, she hit the ground running and started experiments with very little in-house training.

### ***Panel: Tools for the Bioeconomy***

***Sonia Wallman, Ph.D.***, NBC2 Executive Director and PI, has focused on biomanufacturing technician education and training since starting a biotechnology program in 1994 at New Hampshire Community Technical College in Portsmouth, NH to support Lonza Biopharmaceuticals and biopharmaceutical companies Olympus Biotech, Merck-GlycoFi and Adimab in the Hanover-Lebanon, NH area and in Massachusetts and Rhode Island. The NBC2 received a supplement from the NSF ATE program for a Biofuels Workforce Summit held May 23 and 24, 2013 in Honolulu. Dr. Wallman was moderator of a *Roundtable Discussion on Training Technicians to Support the Bioeconomy: Defining the Need; Designing and Implementing Innovative Solutions* that is part of a special section in the October 2013 issue of *Industrial Biotechnology: IB IN DEPTH – Strengthening the Biomanufacturing Workforce*. Dr. Wallman is co-PI and Biomanufacturing Lead for the c3bc.

***Paul Earnshaw*** is the Southwest Sales Engineer for the Eppendorf Bioprocess group in the Southwest. Following his graduation with a B.S. from the University of California at Davis in 1999, Paul worked at Genentech, Inc. at the Vacaville site for both the manufacturing and quality groups. During this time he attended and completed the California State University MBA program and graduated with a degree in Marketing. In 2008 Paul was hired by Eppendorf to sell and support the New Brunswick Scientific products in the Southwest, and in 2011 he became the Bioprocess specialist responsible for the sales and support of the DasGip and New Brunswick Scientific fermentors and bioreactors.

***Sandra Porter, Ph.D.***, is the founder and president of Digital World Biology LLC. In addition to creating Molecule World™, an iPad application for working with molecular structures, and developing new iBooks for interactive teaching, Porter serves as a community development leader for Bio-Link and teaches workshops and on-line courses in bioinformatics. Porter's insights for developing new kinds of educational tools have grown out of her experience in teaching biotechnology and working in bioinformatics software.

***Michael Plantz*** is an Elemental Technical Specialist at Thermo Fisher Scientific. He has 22 years' experience in the Analytical Instruments marketplace providing application development, operator training, product marketing, new product development, and sales support for the AA, ICP-OES, and ICP-MS techniques. Previously, he was a Research Scientist supporting development of pharmaceutical products and IV delivery systems and an Environmental Laboratory Scientist, involving both high sample throughput analysis (IC, AA, ICP, and ICP-MS) and development / testing of draft USEPA Methods for ICP-MS. Michael has a B.S. degree in Chemistry from Butler University, M.S. in Analytical Chemistry from Iowa State University, and M.B.A. from Benedictine University.

***Paul Voelker***, Global Chemical/Petrochemical Market Development Manager at Thermo Scientific, manages the global chemical and petrochemical market for Thermo Scientific's chromatography and spectroscopy products. He has over 25 years marketing management and lab applications experience in Life Science and Industrial markets. Paul holds a B.S. and M.S. in Chemistry from Cal State University at Hayward and from UC Davis, respectively.